Application No.: 10/750,858

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

(currently amended): A discharge bulb, comprising:

an arc tube fixedly positioned and forwardly elongating from an insulating base positioned behind said arc tube, the arc tube comprising:

a ceramic, straight, and cylindrical light emitting tube; having

light blocking sealed end portions, wherein to form an enclosed space is formed

within the ceramic light emitting tube and the sealed end portionstherein; and

electrodes opposingly disposed in said light emitting tube, wherein said enclosed space is filled with a light emitting substance and a starting rare gas; and

a strip-shaped first light blocking portion disposed at a first portion of said ceramic light emitting tube that corresponds to at least a rear one of the sealed end portions of said ceramic light emitting tube,

wherein said first light blocking portion extends, in a circumferential direction, over at least a range from an upper side to both lateral sides of said ceramic light emitting tube, said first light blocking portion being provided as a portion of said ceramic light emitting tube or being provided radially outside of said ceramic light emitting tube;

wherein said first light blocking portion has a width, in an axial direction of the light emitting tube, at least corresponding to a width, in the axial direction, of said rear sealed end portion of said light emitting tube,

said width of the first light blocking portion being no more than a distance between a distal end of the rear scaled end portion and a tip end of an adjacent one of said electrodes.

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2. (previously presented): The discharge bulb according to claim 1, further comprising a

second light blocking portion disposed at a second portion of said ceramic light emitting tube

that corresponds to a front one of the sealed end portions of said light emitting tube,

wherein said second light blocking portion extends, in the circumferential direction, over

at least a range, from a lower side to both of said lateral sides of said ceramic light emitting tube;

said second light blocking portion being provided as a portion of said ceramic light

emitting tube or being provided radially outside of said ceramic light emitting tube;

wherein said second light blocking portion has a width, in an axial direction of the light

emitting tube, at least corresponding to a width, in the axial direction, of the front one of the

sealed end portions of said light emitting tube,

said width of said second light blocking portion being no more than a distance between a

distal end of the front one of the sealed end portions and a tip end of an adjacent one of said

electrodes.

3. and 4. (canceled).

5. (previously presented): The discharge bulb of claim 1, wherein said first light blocking

portion extends in the circumferential direction on both the lateral sides of said light emitting

tube to positions that horizontally coincide in level with a lowermost position of said rear end

sealed portion of said light emitting tube.

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front end sealed portion of said light emitting tube.

6. (previously presented): The discharge bulb of claim 2, wherein said second light blocking portion extends in the circumferential direction on both the lateral sides of said light emitting tube to positions that horizontally coincide in level with an uppermost position of said

(previously presented): The discharge bulb of claim 1, wherein said first light blocking
portion is disposed in the circumferential direction over a whole circumference of said light
emitting tube.

8. (currently amended): A discharge bulb, comprising:

an arc tube fixedly positioned and forwardly elongating from an insulating base positioned behind said arc tube, the arc tube comprising:

a ceramic, straight, and cylindrical light emitting tube; having

light blocking sealed end portions, wherein -to-form an enclosed space-therein is

formed within the ceramic light emitting tube and the sealed end portions; and

electrodes opposingly disposed in said light emitting tube, wherein said enclosed space is filled with a light emitting substance and a starting rare gas;

an ultraviolet-ray blocking glass shroud surrounding said light emitting tube; and

a strip-shaped first light blocking portion disposed at a first portion of said ceramic light emitting tube that corresponds to at least a rear one of the sealed end portions of said ceramic light emitting tube. sealed end portions of said light emitting tube,

wherein said first light blocking portion extends, in a circumferential direction, over at least a range from an upper side to both lateral sides of said ceramic light emitting tube;

said first light blocking portion being provided radially outside of said ultraviolet-ray

blocking glass shroud;

wherein said first light blocking portion has a width, in an axial direction of the light emitting tube, at least corresponding to a width, in the axial direction, of the rear one of the

said width of the first light blocking portion being no more than a distance between a distal end of the rear one of the sealed end portions and a tip end of an adjacent one of said electrodes.

9. (previously presented): The discharge bulb according to claim 8, further comprising a second light blocking portion disposed at a second portion of said ceramic light emitting tube that corresponds to a front one of said sealed end portions of said ceramic light emitting tube,

wherein said second light blocking portion extends, in the circumferential direction, over at least a range from a lower side to both of said lateral sides of said ceramic light emitting tube; said second light blocking portion being provided radially outside of said ultraviolet-ray blocking glass shroud;

wherein said second light blocking portion has a width, in an axial direction of the light emitting tube, at least corresponding to a width, in the axial direction, of the front one of the scaled end portions of said light emitting tube,

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said width of said second light blocking portion being no more than a distance between a

distal end of the front one of the sealed end portions and a tip end of an adjacent one of said

electrodes.

10. and 11. (canceled).

12. (previously presented): The discharge bulb of claim 8, wherein said first light

blocking portion extends in the circumferential direction on both the lateral sides of said light

emitting tube to positions that horizontally coincide in level with a lowermost position of said

rear end sealed portion of said light emitting tube.

13. (previously presented): The discharge bulb of claim 9, wherein said second light

blocking portion extends in the circumferential direction on both the lateral sides of said light

emitting tube to positions that horizontally coincide in level with a an uppermost position of said

front end sealed portion of said light emitting tube.

14. (previously presented): The discharge bulb of claim 8, wherein said first light

blocking portion is disposed in the circumferential direction over a whole circumference of said

light emitting tube.

15. (currently amended): A discharge bulb, comprising:

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an arc tube fixedly positioned and forwardly elongating from an insulating base positioned behind said arc tube, the arc tube comprising:

a ceramic, straight, and cylindrical light emitting tube; having

light blocking sealed end portions, wherein to form an enclosed space therein is

formed within the ceramic light emitting tube and the sealed end portion; and

electrodes opposingly disposed in said light emitting tube, wherein said enclosed

space is filled with a light emitting substance and a starting rare gas; and

radially outside of said ceramic light emitting tube.

means for positioning a hot zone of a luminous distribution at a cutoff line of said luminous distribution, and substantially reducing a glare light output, said means for positioning the hot zone being provided as a portion of said ceramic light emitting tube or being provided

16. (previously presented): The discharge bulb of claim 15, wherein:

said means for positioning and substantially reducing comprises a strip-shaped first light blocking portion disposed at a first portion of said light emitting tube that corresponds to at least a rear one of the sealed end portions of said light emitting tube; and

said first light blocking portion extends, in a circumferential direction, over at least a range from an upper side to both lateral sides of said light emitting tube,

wherein said first light blocking portion has a width, in an axial direction of the light emitting tube, at least corresponding to a width, in the axial direction, of the rear one of the sealed end portions of said light emitting tube.

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said width of the first light blocking portion being no more than a distance between a

distal end of the rear one of the sealed end portions and a tip end of an adjacent one of said

electrodes.

17. (previously presented): The discharge bulb according to claim 16, wherein:

said means for positioning and substantially reducing further comprises a second light

blocking portion disposed on a second portion of said light emitting tube that corresponds to a

front one of the sealed end portions of said light emitting tube; and

said light blocking portion extends, in a circumferential direction, over at least a range

from a lower side to both of said lateral sides of said light emitting tube,

wherein said second light blocking portion has a width, in an axial direction of the light

emitting tube, at least corresponding to a width, in the axial direction, of the front one of the

sealed end portions of said light emitting tube,

said width of said second light blocking portion being no more than a distance between a

distal end of the front one of the sealed end portions and a tip end of an adjacent one of said

electrodes.

18. (canceled).

19. (previously presented): The discharge bulb of claim 16, wherein:

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said first light blocking portion extends in the circumferential direction on both the lateral sides of said light emitting tube to positions that horizontally coincide in level with a lowermost

position of said rear end sealed portion of said light emitting tube;

said second light blocking portion extends in the circumferential direction on both the

lateral sides of said light emitting tube to positions that horizontally coincide in level with a an

uppermost position of said front end sealed portion of said light emitting tube; and

said first light blocking portion is disposed in the circumferential direction over a whole

circumference of said light emitting tube.

20. (previously presented): The discharge bulb of claim 16, further comprising an

ultraviolet-ray blocking glass shroud surrounding said light emitting tube.